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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,054	04/14/2004	Eric Lawrence Barsness	ROC920030052US1	6100

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EXAMINER	
NGUYEN, CINDY	
ART UNIT	PAPER NUMBER
2161	

MAIL DATE	DELIVERY MODE
04/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/824,054	BARSNESS ET AL.	
	Examiner	Art Unit	
	Cindy Nguyen	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/02/06; 09/19/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is response to applicant filed 04/14/04.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 09/19/05 and 05/02/06 are being considered by the examiner.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 10, a computer-readable medium carrying one or more sequences of Instructions for executing transactions is recited in the claim. "Computer-readable signal bearing media" as defined in the specification (0045) may transmit or carry instructions to a computer, including a wireless communications, communication medium A signal encoded with functional descriptive material does not fall within any of the categories of patentable subject matter. Therefore, claims 13-25 are not statutory (As set forth in § 101, a claimed signal is clearly not a process under § 101 because it is not a series of steps. A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result, and

does not fit within the definition of a machine. A claimed signal is not matter, but a form or energy, and therefore is not a composition of matter or product).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6, 7, 10-12, 15-17 and 20-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamashita (US 20020002578).

Regarding claims 1, 6 and 10, Yamashita discloses: An apparatus, a computer implemented method for managing access to computer resources and a program product comprising: at least one processor (1, fig. 3 and corresponding text, Yamashita); a memory coupled to the at least one processor (2, fig. 3 and corresponding text, Yamashita); and

a scheduling manager (scheduler 31) residing in the memory (paragraphs 0071, 0072, Yamashita);

the scheduling manager scheduler dynamically managing access of work items (0071 0072) of a program to additional computer resources (0112) other than the at least one processor based on determining if valuations of each work item to be processed exceed estimated processor costs for respective ones of the work items (0106, 0107, 0112, Yamashita).

Regarding claims 15 and 20, Shi discloses: A networked environment (22, fig. 2) and a computer implemented method, comprising: a grid of computing resources (PE1-PEP, fig. 2), Yamashita);

a memory coupled to at least the one processor of the one computer system (2, fig. 3. 1 and corresponding text, Yamashita); and,

a request manager of the grid to receive requests of one or more customers for utilization of computing resources of the grid (0069, 0103, 0104, Yamashita); one or more computer systems (21, fig. 2) of a customer coupled to the request manager (32, fig. 2; the one computer system comprising one or more processors (PE1-PEP, fig. 2).

a scheduling manager residing in the memory and executable by the at least one processor (0071, 0072), the scheduling manager dynamically managing access of work items (tasks) of a program to additional computer resources other than the at least one processor based on determining if valuations of each work item to be processed exceed estimated

processor costs for respective ones of the work items (0071, 0072, 0106, 0107, 0112, Yamashita).

Regarding claim 23, A method of providing fee-based processing for programs in a processor system, whereby fees are based on projected utilization of computer resources to be used for completing processing a program, the processor system including at least one processor (PE1-PEP, Yamashita);

a memory coupled to the at least one processor (2, fig. 3 and corresponding text, Yamashita), and

a scheduling manager residing in the memory, the method comprising the steps of having the scheduling manager being executable for dynamically managing the access of additional computer resources to be applied to a program based on valuations of work items of a program that is to be processed (0071, 0072, 0106, 0107, 0112, Yamashita); and,

a mechanism for predicting costs for the dynamically determined computer resources to be used (judged the execution starting time and ending time , (0106, Yamashita).

Regarding claims 2, 7, 11, 16, 21 and 24, all the limitations of these claims have been noted in the rejection of claims 1, 6, 10, 15, 20 and 23 above, respectively. In addition, Yamashita discloses: wherein the scheduling manager applies a valuation heuristic to each work item (0043, 0047, Yamashita) .

Regarding claims 3, 12, 17, 22 and 25, all the limitations of these claims have been noted in the rejection of claims 1, 10, 22, 20 and 24 above, respectively. In addition, Yamashita discloses: wherein the processing of each work item is delayed if an estimated processing cost of each work item exceeds the valuation of the respective work item (0106-0112, Yamashita).

Regarding claim 27, Yamashita discloses: A computer program product for use in a computer-implemented process for providing fee-based dynamic allocations of computer resources for executing a program, the computer program product comprising: a medium readable by a computer and having computer program adapted for: providing a scheduling manager being executable for dynamically managing the access of additional computer resources to be applied to work items of a program based on valuations of the work items processed (0071, 0072, 0106, 0107, 0112, Yamashita); and, a mechanism for predicting costs for the dynamically determined computer resources to be used (0106, Yamashita).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 5, 8, 9, 13, 14, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. (US 20020002578) (Yamashita) in view of Shi (US 6757897) (hereafter Shi).

Regarding claims 4, 8, 13 and 18, all the limitations of these claims have been noted in the rejection of claims 3, 6, 12 and 17 above, respectively. However, Yamashita didn't discloses: wherein the scheduling manager applies a priority algorithm for preventing starvation of computer resources to those work items which have been delayed, whereby the processing of all the work items in a program is completed.. On the other hand, Shi discloses: wherein the scheduling manager applies a priority algorithm for preventing starvation of computer resources to those work items which have been delayed, whereby the processing of all the work items in a program is completed (col. 8, lines 45-60, Shi). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include wherein the scheduling manager applies a priority algorithm for preventing starvation of computer resources to those work items which have been delayed, whereby the processing of all the work items in a program is completed in the system of Yamashita as taught by Shi. The motivation being to provided that method that prevents a task scheduling algorithm from starving lower priority tasks of processor time to schedule a plurality of tasks having varying priorities in a time sliced manner for performance on a processing unit in order to avoid network bottlenecks causing delays or lost data.

Regarding claims 5, 9, 14 and 19, all the limitations of these claims have been noted in the rejection of claims 4, 7, 13 and 18 above, respectively. In addition, Yamashita/Shi discloses: wherein the priority algorithm increases respective valuations of delayed work items

so as to complete processing of each of the work items prior to or at a cut-off processing date of the work item (col. 3, lines 30-40, Shi).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cindy Nguyen

APU MOFIZ
SUPERVISORY PATENT EXAMINER